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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/833,967 | 04/11/2001 | Stephan V. Schell | 110411QPR.US | 3832 |
| 30233 | 7590 | 10/18/2004 | EXAMINER | |
| TROPIAN INC. 20813 STEVENS CREEK BLVD. CUPERTINO, CA 95014 | | | | VO, DON NGUYEN |
| | | ART UNIT | | PAPER NUMBER |
| | | 2631 | | |

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/833,967 | SCHELL, STEPHAN V. |
| | Examiner | Art Unit |
| | DON N VO | 2631 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 June 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 and 19-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1-16,26-32,37 and 38 is/are allowed.
- 6) Claim(s) 17,19-23 and 33-35 is/are rejected.
- 7) Claim(s) 24,25 and 36 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Acknowledgment

1. This Office Action is responsive to the Amendment filed on 6/28/204.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelton et al (5,745,527; art of record) in view of Su (5,847,602).

Regarding claims 17, 19, 20 and 23, as shown in figure 1, Kelton teaches an apparatus for controlling the ramping of the QAM communications signal comprising adding (16 and 12) predetermined sequence of symbols (zeros) to the information symbols and performing modulation (13, 19 and 20) to produce an envelope signal. See column 5, lines 18-47. Kelton fails to teach using a polar modulator as now amended in claim 17. However, Kelton also suggests that other modulation types are also applicable and numerous modifications and changes will readily occur to those skilled in the art. See column 5, lines 40-58. In addition, using polar modulator for modulating the signal is well known in the art of communications. See figures 1 and 3 and column 1, lines 35-50 of Su (5,847,602). Therefore, it would have been obvious to one of ordinary skill in the

art at the time the invention was made to modify the system of Kelton by using the polar modulator as taught by Su for RF communications since it is just an alternative way of communicating signals.

Regarding claims 21 and 22, Kelton teaches all subject matter claimed except for specifically teaching that the communications signal is an EDGE communications signal (claim 21) or a D-AMPS communications signal (claim 22). However, Kelton also teaches that other modulation types are also applicable and numerous modifications and changes will readily occur to those skilled in the art. See column 5, lines 40-58. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kelton et al to be operable for the EDGE communications signal or a D-AMPS communications signal if it is needed for communicating the EDGE communications signal or a D-AMPS communications signal since it is just a matter of selecting a different modulation type. (Column 5, lines 40-47)

4. Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Su (5,847,602) in view of Khoini-Poorfard (2002/0168026) or Nguyen et al (6,148,040).

Regarding claim 33, as shown in figure 3, Su teaches a ramp generator (31) and non-linear amplifier (42,43) having an amplitude input (44) for receiving the ramping signal and a phase input for receiving the phase modulated signal from limiter (41). See also column 4, line 30 to column 5, line 54. Su fails to teach that the phase-modulated signal is a GMSK signal. However, it has been known

in the art of digital communications that the GMSK is a specific type of phase modulation. See paragraph [0025] of Khoini-Poorfard and column 4, lines 7-29 of Nguyen et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Su by using the GMSK signal for phase modulation since the GMSK signal is a specific type of phase modulation.

Regarding claim 34, Khoini-Poorfard further teaches using the EDGE pulse for modulating. See paragraph [0026].

Regarding claim 35, Khoini-Poorfard and Nguyen et al further teach that the GMSK can be generated using PAM signal. See paragraphs [0024] and [0027] of Khoini-Poorfard and column 4, lines 7-20 of Nguyen et al.

Allowable Subject Matter

5. Claims 1-16, 26-32, 37 and 38 are allowed.

6. Claims 24, 25, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 17 and 19-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DON N VO whose telephone number is (571) 272-3018. The examiner can normally be reached on TUE - FRI (9:00-6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MOHAMMAD GHAYOUR can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2631

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DON N VO
Primary Examiner
Art Unit 2631